

$$q_u = 1.6 \times 6.0 + 1.8 \times 10.0 = 27.6 \frac{\text{kN}}{\text{m}^2}$$

$$q_{u1} = 1.6 \times 6.0 + 1.8 \times \frac{10.0}{2} = 18.6 \frac{\text{kN}}{\text{m}^2}$$

$$q_{u2} = \pm 1.8 \times \frac{10.0}{2} = \pm 9.0 \frac{\text{kN}}{\text{m}^2}$$

$$M_{u1,X}^C = \frac{18.6}{27.6} \times 21.5 = 14.5 \frac{\text{kNm}}{\text{m}}$$

$$M_{u1,Y}^C = \frac{18.6}{27.6} \times 22.4 = 15.1 \frac{\text{kNm}}{\text{m}}$$

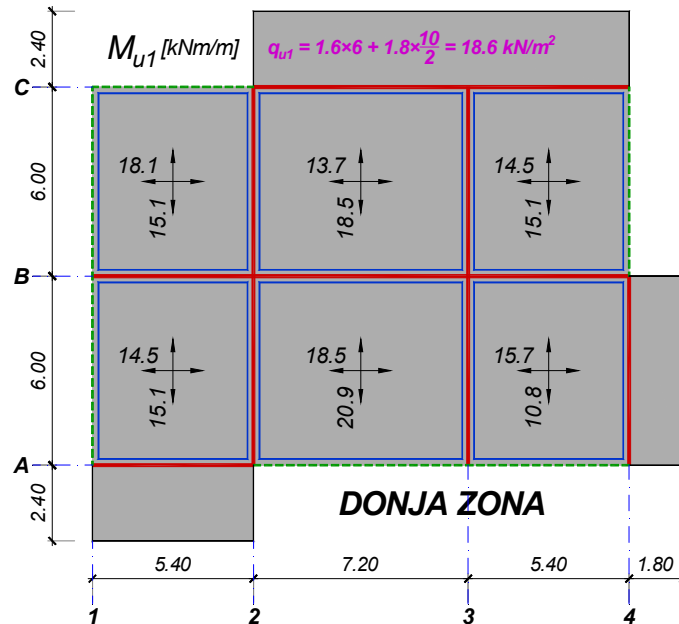
...

...

$$M_{u1,Y}^G = \frac{18.6}{27.6} \times 27.4 = 18.5 \frac{\text{kNm}}{\text{m}}$$

Donja zona, $q_{u1} = 1.6 \times G + 1.8 \times P/2$

5



Donja zona, ploče C,E,F: $q_{u2} = \pm 1.8 \times P/2$

6

$$\frac{L_y}{L_x} = \frac{6.0}{5.4} \approx 1.1$$

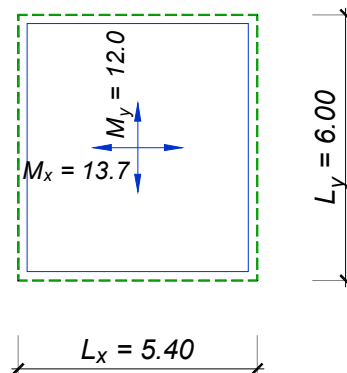
$$M_{xu} = 0.047 \times q_{u2} \times L_x \times L_y$$

$$M_{xu} = 0.047 \times 9.0 \times 5.4 \times 6.0 = 13.7 \frac{\text{kNm}}{\text{m}}$$

$$M_{yu} = 0.041 \times q_{u2} \times L_x \times L_y$$

$$M_{yu} = 0.041 \times 9.0 \times 5.4 \times 6.0 = 12.0 \frac{\text{kNm}}{\text{m}}$$

l_x	l_y	l_y/l_x	1.0	1.1
M_x	0.044	0.047		
M_y	0.044	0.041		



Donja zona, ploče D,G: $q_{u2} = \pm 1.8 \times P/2$

$$\frac{L_y}{L_x} = \frac{7.2}{6.0} = 1.2$$

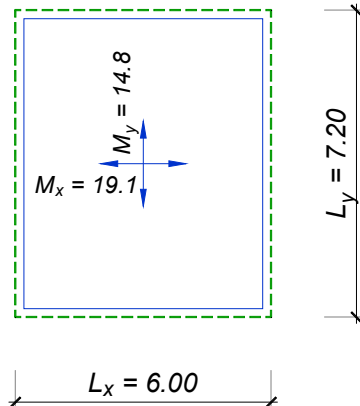
$l_y : l_x$	1,0	1,1	1,2
M_x	0,044	0,047	0,049
M_y	0,044	0,041	0,038

$$M_{xu} = 0.049 \times q_{u2} \times L_x \times L_y$$

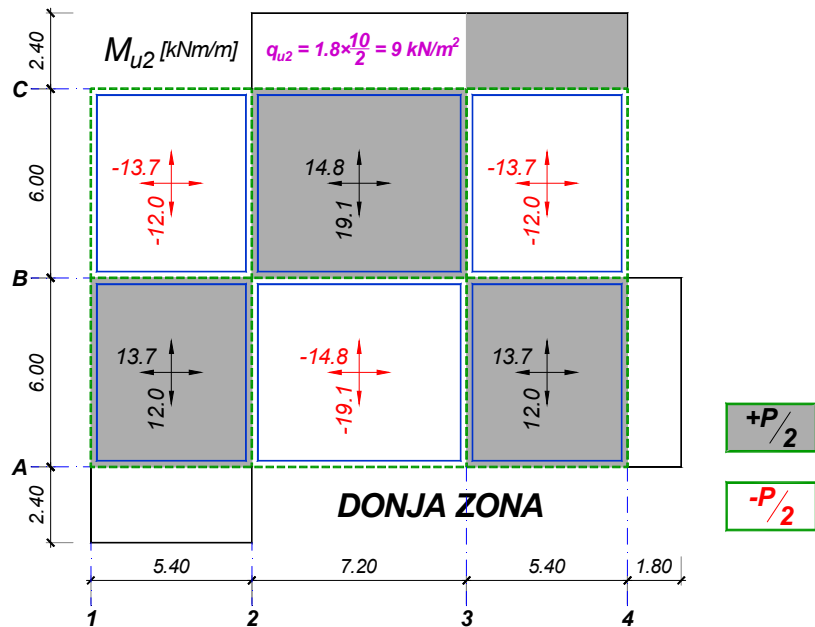
$$M_{xu} = 0.049 \times 9.0 \times 6.0 \times 7.2 = 19.1 \frac{kNm}{m}$$

$$M_{yu} = 0.038 \times q_{u2} \times L_x \times L_y$$

$$M_{yu} = 0.038 \times 9.0 \times 6.0 \times 7.2 = 14.8 \frac{kNm}{m}$$

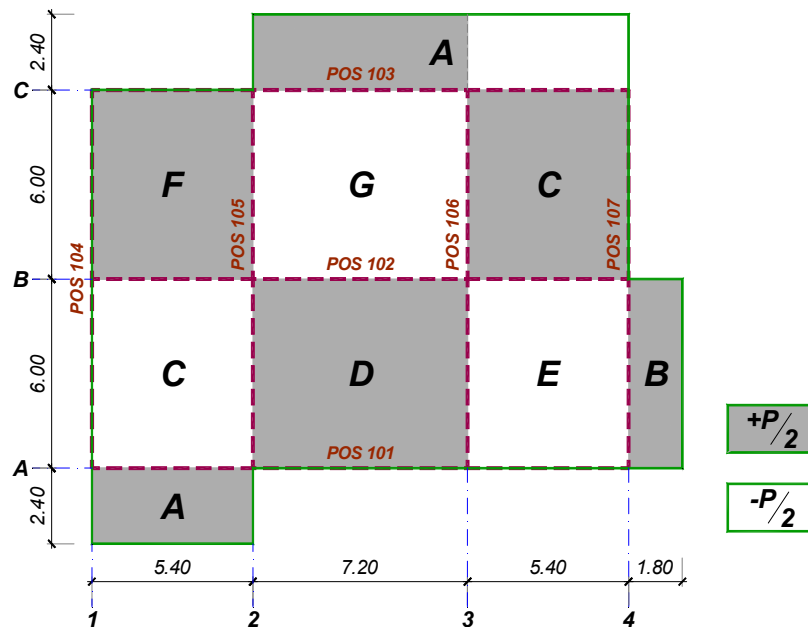


Donja zona, $q_{u2} = \pm 1.8 \times P/2$



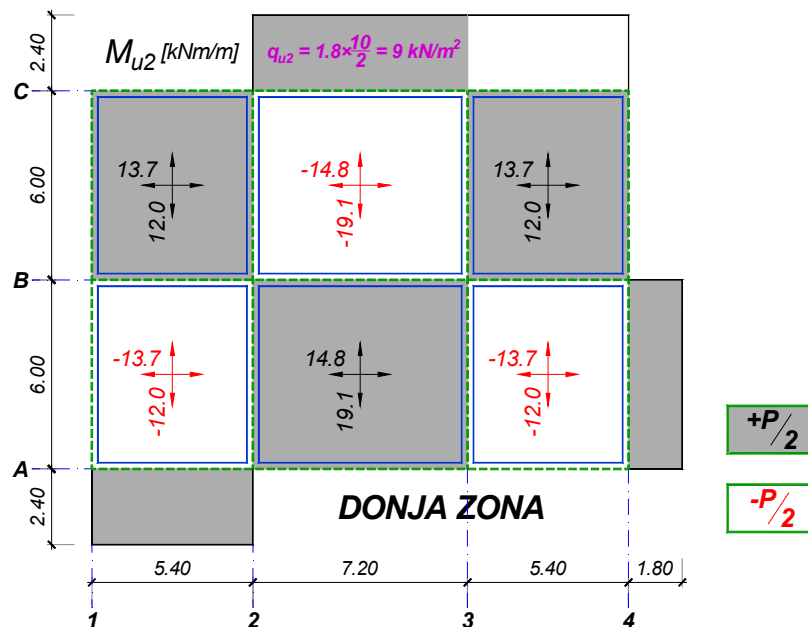
Šema opterećenja za polja (položaj opt. 2)

9



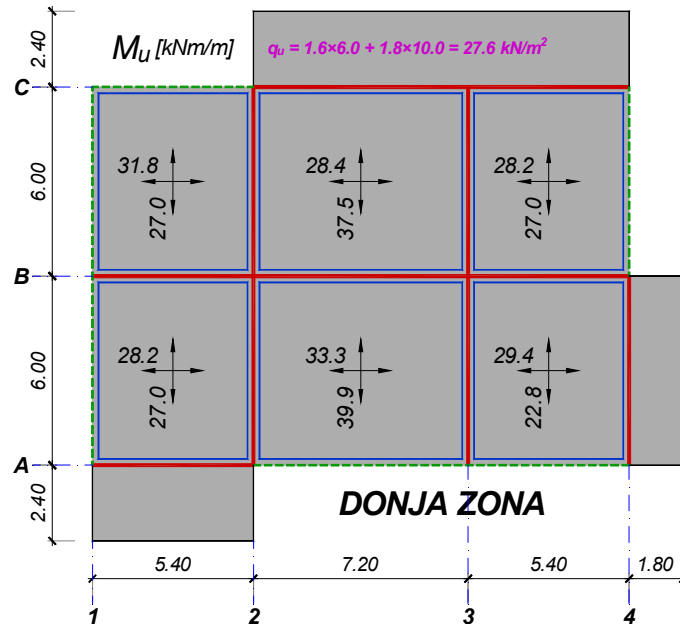
Donja zona, $\pm 1.8 \times P/2$

10



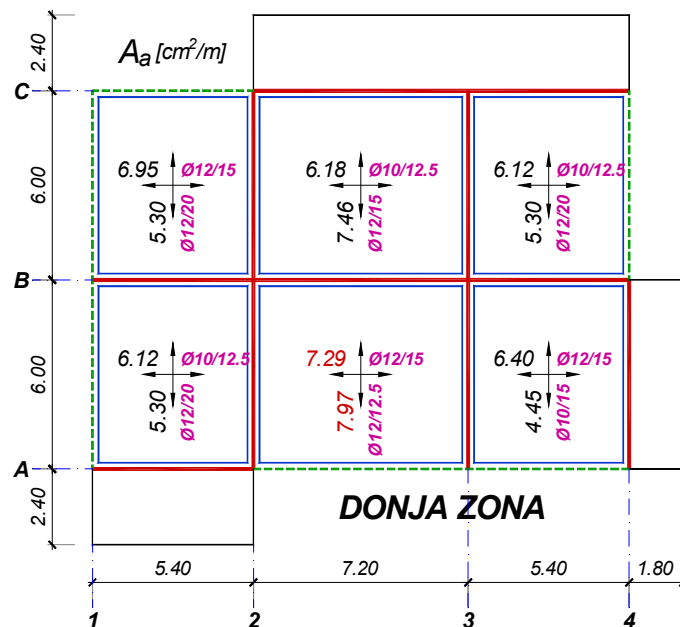
Donja zona, $q_{u1}+q_{u2}$ (ekstremni uticaji)

11



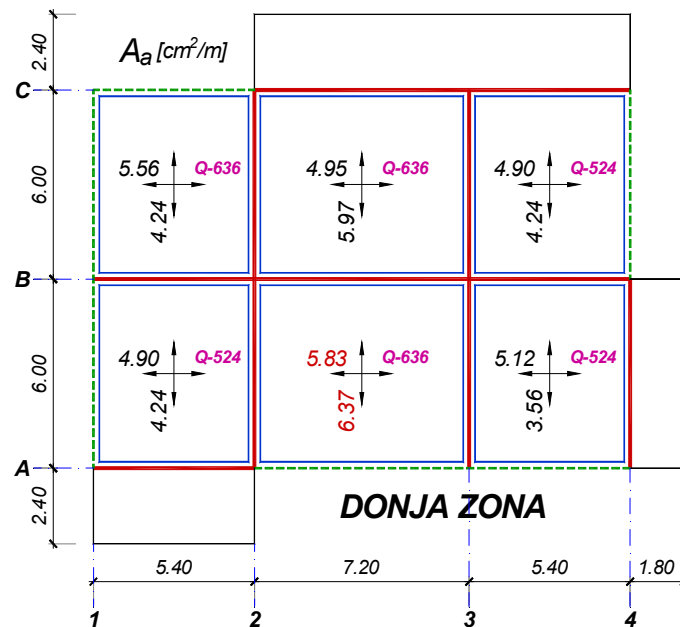
Potrebna armatura – donja zona (RA 400/500)

12



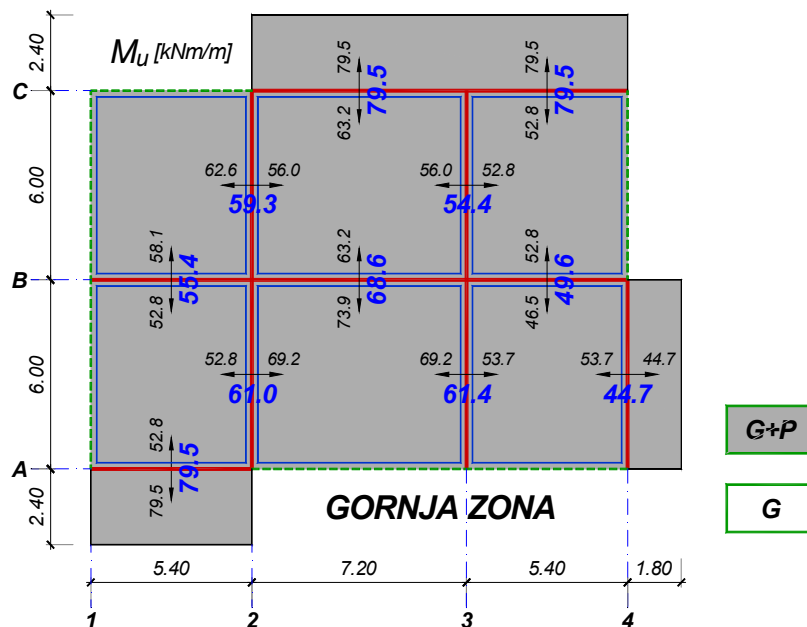
Potrebna armatura – donja zona (MA 500/560)

13



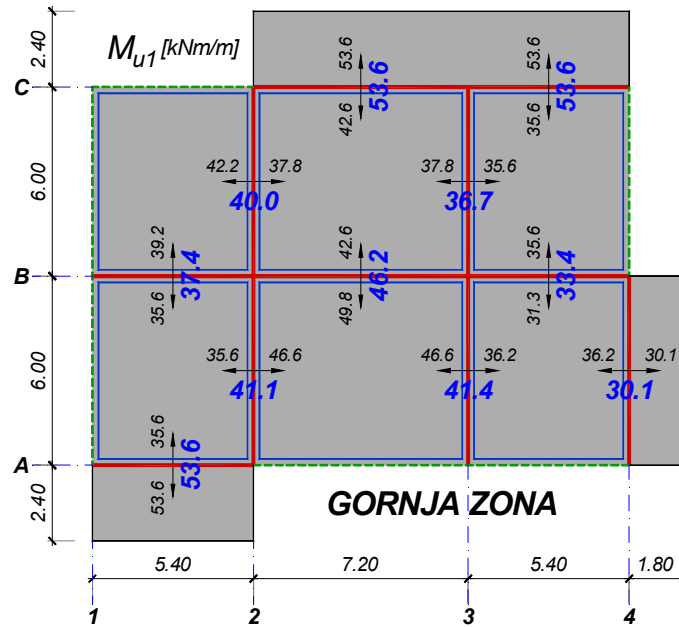
Gornja zona, $q_u = 1.6 \times G + 1.8 \times P$ (totalno opt.)

14



Gornja zona, $q_{u1} = 1.6 \times G + 1.8 \times P/2$

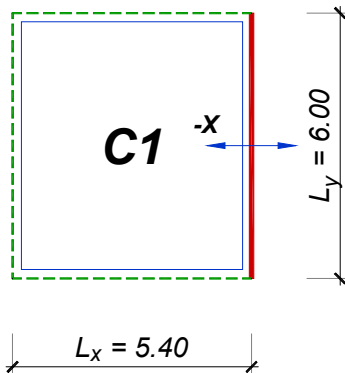
17



Gornja zona, X pravac, ploča C1: $q_{u2} = \pm 1.8 \times P/2$

18

$$\frac{L_y}{L_x} = \frac{6.0}{5.4} \approx 1.1$$



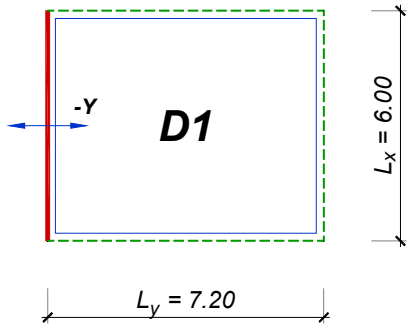
	$l_y = l_x$	1,0	1,1	1,2
M_x		0,044	0,047	0,049
M_y		0,044	0,041	0,038
M_x	-X	0,037	0,037	0,038
M_y	-X	0,031	0,027	0,023
-X		0,084	0,084	0,082

$$-X_{u2} = 0.084 \times q_{u2} \times L_x \times L_y$$

$$-X_{u2} = 0.084 \times 9.0 \times 5.4 \times 6.0 = 24.5 \frac{\text{kNm}}{\text{m}}$$

Gornja zona, X pravac, ploča D1: $q_{u2} = \pm 1.8 \times P/2$

$$\frac{L_y}{L_x} = \frac{7.2}{6.0} = 1.2$$

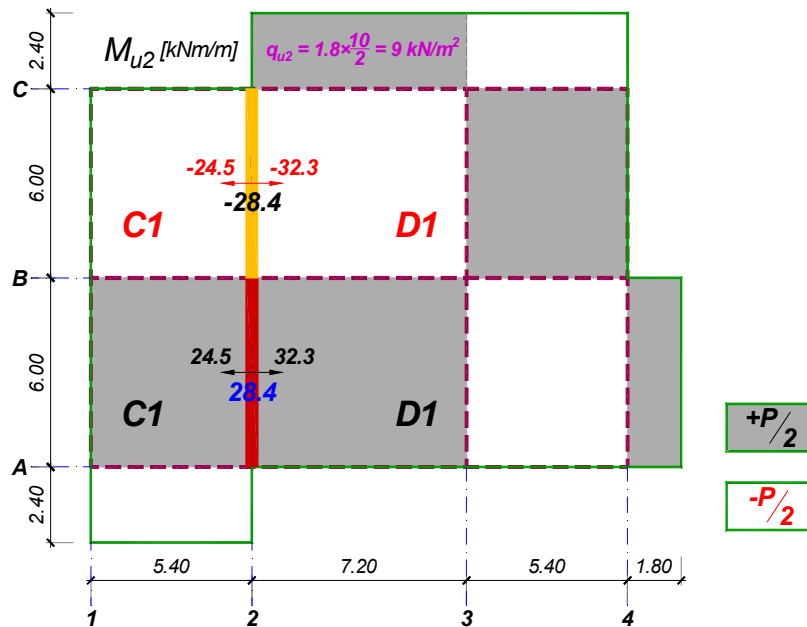


$l_y = l_x$	1,0	1,1	1,2
M_x	0,044	0,047	0,049
M_y	0,044	0,041	0,038
M_x	0,031	0,035	0,038
M_y	0,037	0,036	0,034
$-Y$	0,084	0,084	0,083

$$-Y_{u2} = 0.083 \times q_{u2} \times L_x \times L_y$$

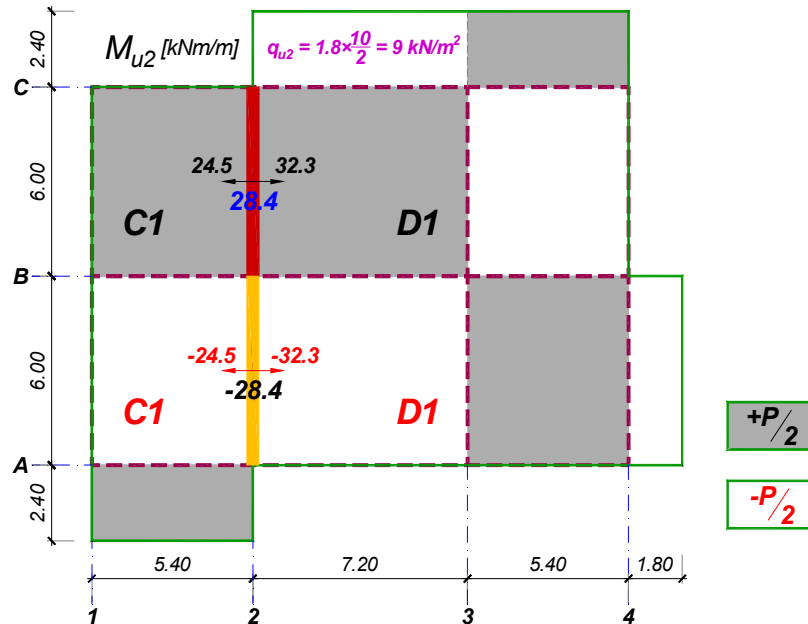
$$-Y_{u2} = 0.083 \times 9.0 \times 6.0 \times 7.2 = 32.3 \frac{\text{kNm}}{\text{m}}$$

Oslonac u osi 2 (deo A-B), $q_{u2} = \pm 1.8 \times P/2$



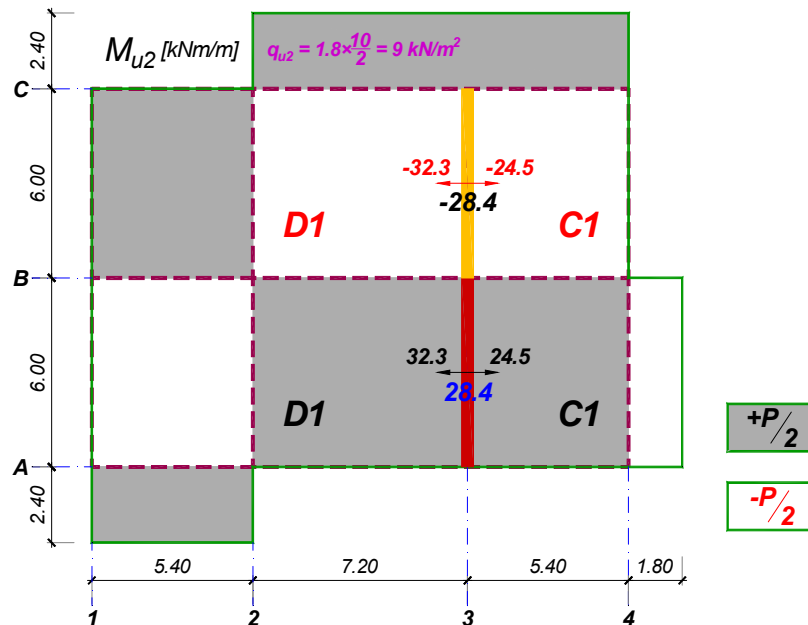
Oslonac u osi 2 (deo B-C), $q_{u2} = \pm 1.8 \times P/2$

21



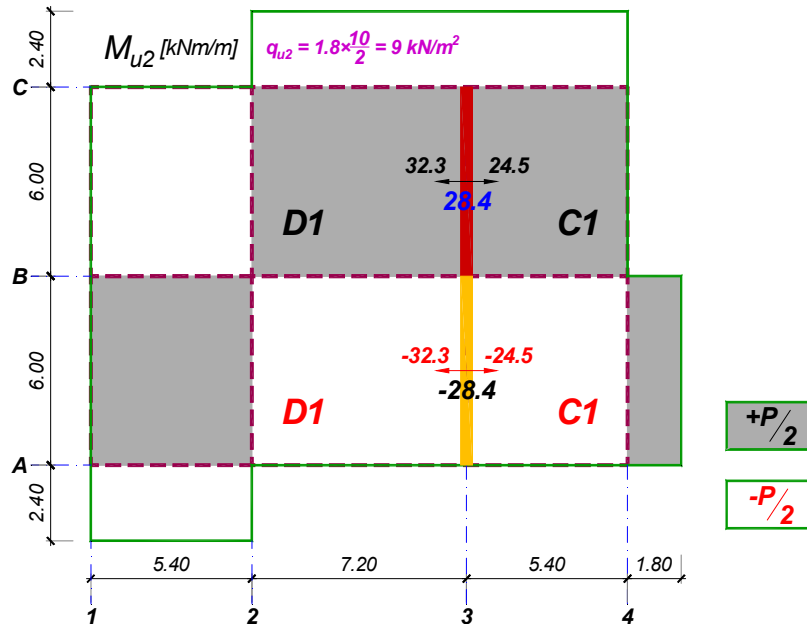
Oslonac u osi 3 (deo A-B), $q_{u2} = \pm 1.8 \times P/2$

22



Oslonac u osi 3 (deo B-C), $q_{u2} = \pm 1.8 \times P/2$

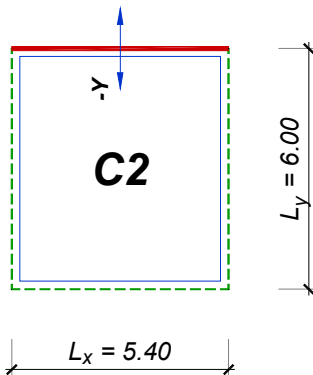
23



Gornja zona, Y pravac, ploča C2: $q_{u2} = \pm 1.8 \times P/2$

24

$$\frac{L_y}{L_x} = \frac{6.0}{5.4} \approx 1.1$$



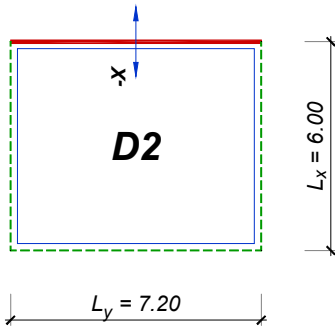
$l_y = l_x$	1,0	1,1	1,2
Mx	0,044	0,047	0,049
My	0,044	0,041	0,038
Mx	0,031	0,035	0,038
My	0,037	0,036	0,034
-Y	0,084	0,084	0,083

$$-Y_{u2} = 0.084 \times q_{u2} \times L_x \times L_y$$

$$-Y_{u2} = 0.084 \times 9.0 \times 5.4 \times 6.0 = 24.5 \frac{\text{kNm}}{\text{m}}$$

Gornja zona, Y pravac, ploča D2: $q_{u2} = \pm 1.8 \times P/2$

$$\frac{L_y}{L_x} = \frac{7.2}{6.0} = 1.2$$

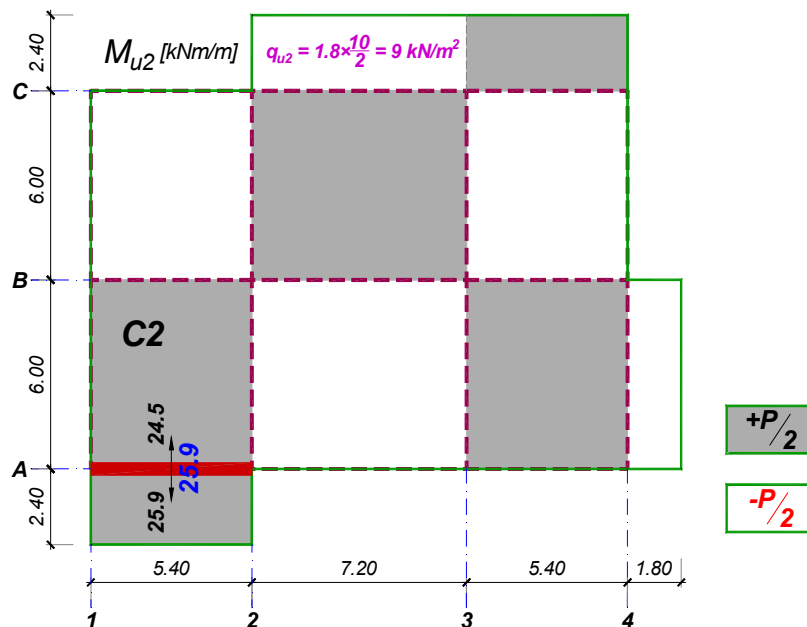


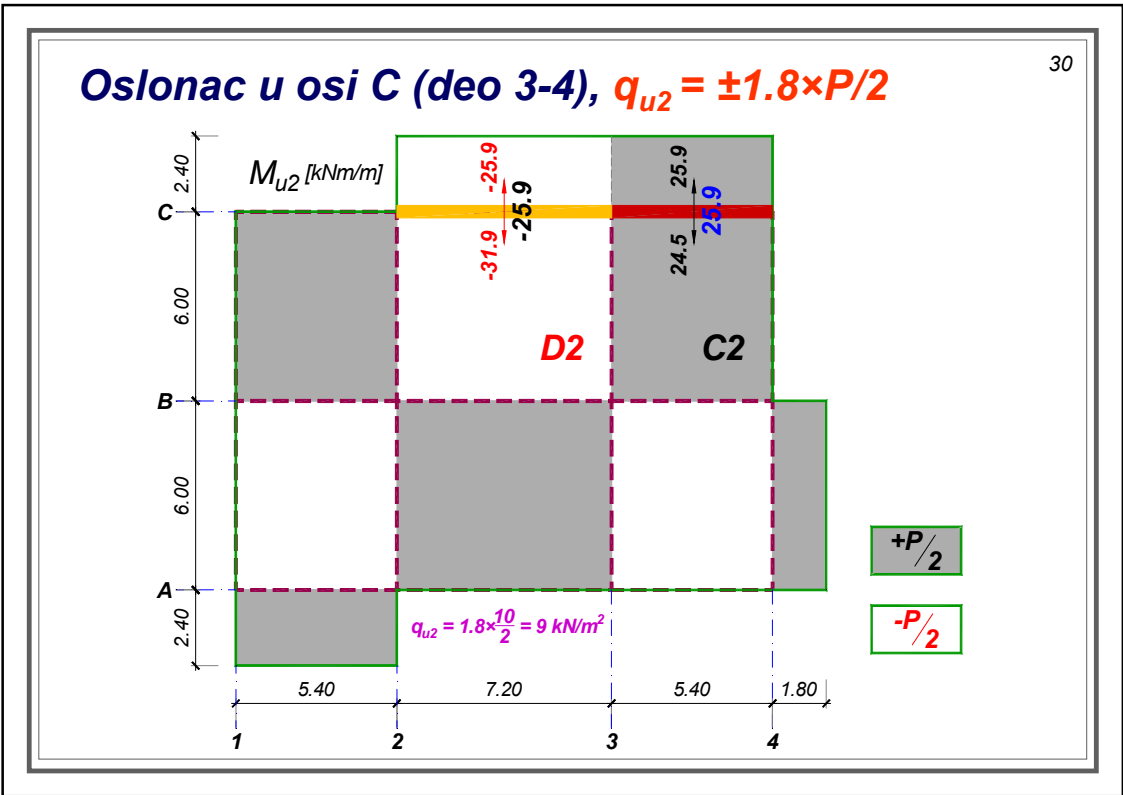
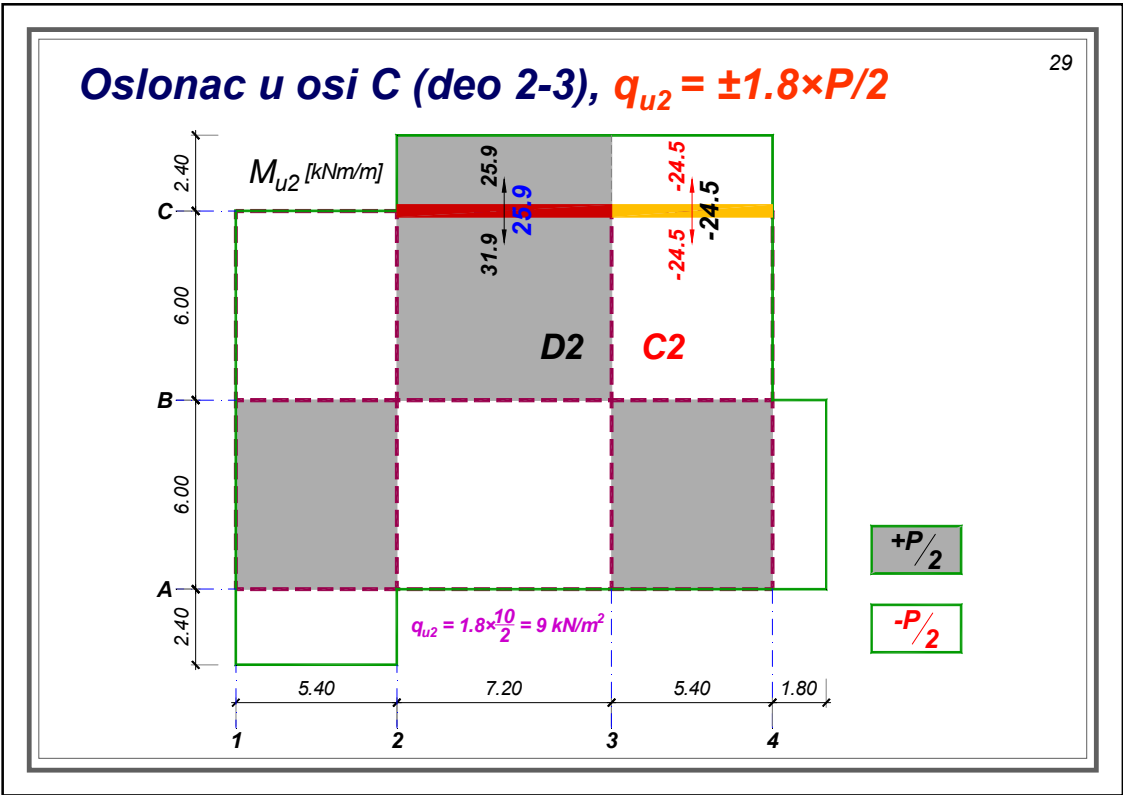
$l_y : l_x$	1,0	1,1	1,2
M_x	0,044	0,047	0,049
M_y	0,044	0,041	0,038
$-X$	0,037	0,037	0,038
M_y	0,031	0,027	0,023
$-X$	0,084	0,084	0,082

$$-Y_{u2} = 0.082 \times q_{u2} \times L_x \times L_y$$

$$-Y_{u2} = 0.082 \times 9.0 \times 6.0 \times 7.2 = 31.9 \frac{\text{kNm}}{\text{m}}$$

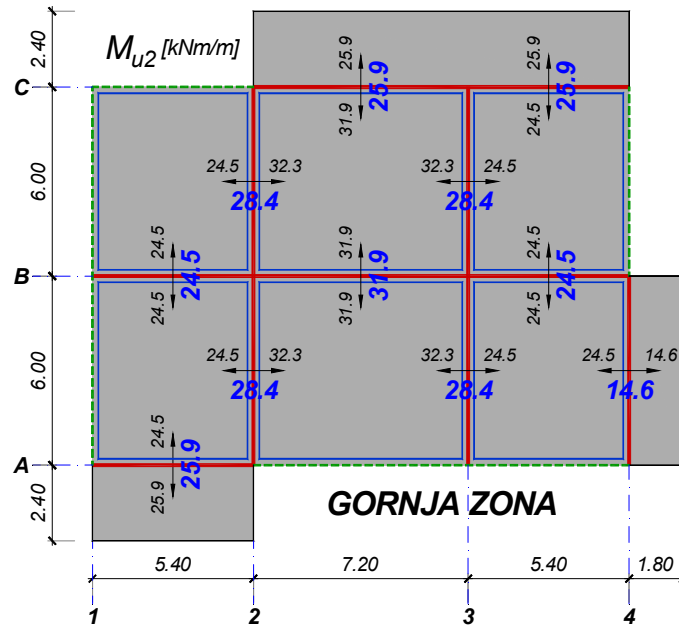
Oslonac u osi A (deo 1-2), $q_{u2} = \pm 1.8 \times P/2$





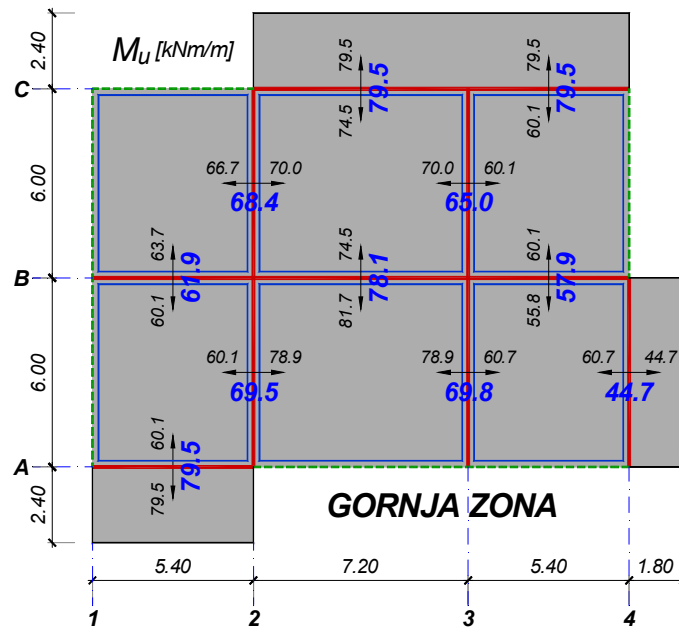
Gornja zona, $q_{u2} = \pm 1.8 \times P/2$

31



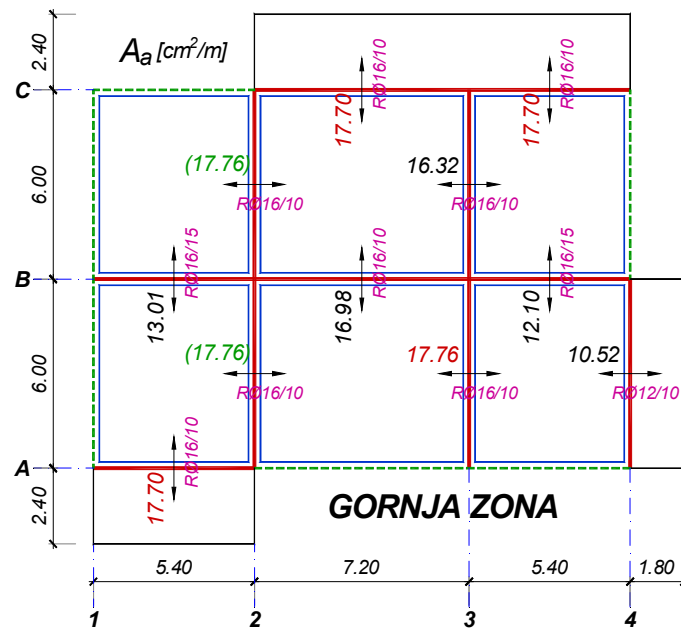
Gornja zona, $q_{u1} + q_{u2}$ (ekstremni uticaji)

32



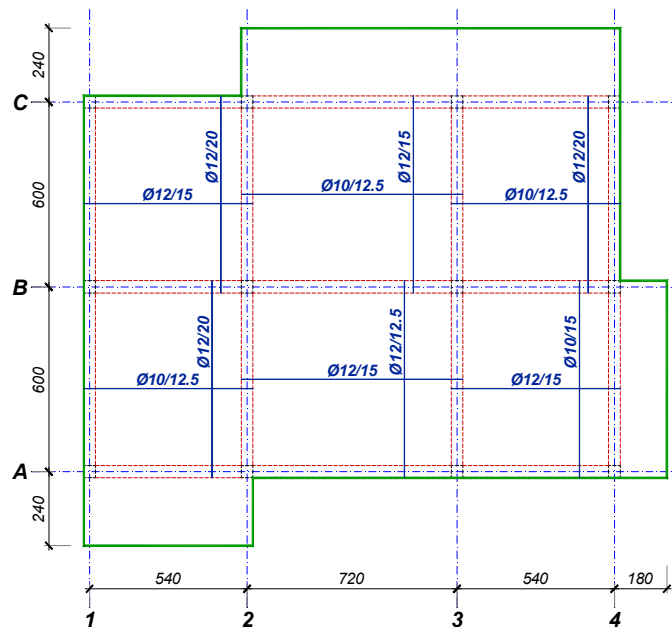
Potrebna armatura – gornja zona

33



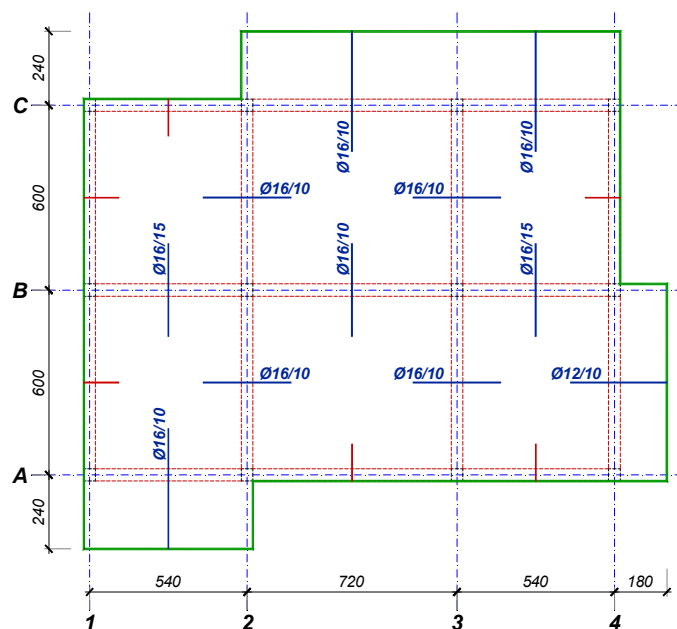
Šema armiranja – donja zona

34



Šema armiranja – gornja zona

35



Šema armiranja – gornja zona

36

